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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,437	02/20/2004	Joseph J. Kubler	14364US19	6381

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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/783,437	KUBLER ET AL.	
	Examiner	Art Unit	
	KHUONG TRAN	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 Febrary 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-69* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-69* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 Febrary 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. This application is a continuation of U.S. Serial No. 10/141,506 filed May 8, 2002, (Attorney Docket Nos. 14364US01 and DN37998XGB), now U.S. Patent No. 6,850,510 issued February 1, 2005, which is a continuation of U.S. Serial No. 09/037,535 filed March 10, 1998, now U.S. Patent No. 6,389,010 issued May 14, 2002, which is a continuation of U.S. Serial No. 08/539,817 filed October 5, 1995, now U.S. Patent No. 5,726,984 issued March 10, 1998.

Regarding claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 22, 23, 26, 27, 29, 34-40, 43, 45-48, 52, 54, 55, 57-61, 64, 65, and 67-69 are rejected under 35 U.S.C. 102(e) as being anticipated by Kennedy, III et al (U.S Patent No. 5,734,981).

Regarding claim 22, Kennedy, III et al teach a communication system controller **(FIG. 3)** comprising:

- interface circuitry **(160, FIG. 3)** for exchanging, with an information transmission device **(12, FIG. 1, FIG. 2)**, at least one of information requesting setup of a call and parameters for configuring the information transmission device **(column 10, lines 66-67, column 12, lines 62-64)**;
- at least one processor **(140, FIG. 3)** communicatively coupled to the interface circuitry **(column 9, lines 36-39)**; and
- operational software executable by the at least one processor **(column 11, lines 57-62)**, the operational software causing the at least one processor to produce the parameters for configuring the information transmission device **(12, FIG. 1)** based upon the information requesting setup of a call **(column 12, lines 25-33, 45-54)**, the information transmission device **(12, FIG. 1)** thereby communicatively coupling one of a plurality of communication networks **(16, FIG. 1)** to another of the plurality of communication networks **(38, FIG. 1, column 12, lines 62-67, column 13, lines 1-2)**.

Regarding claim 23, Kennedy, III et al teach the controller of claim 22 wherein the plurality of communication networks comprises a packet network **(column 5, lines 56-61)**.

Regarding claim 26, Kennedy, III et al teach the controller of claim 23 wherein the packet network comprises a wireless network **(24, FIG. 1, column 4, lines 5-12)**.

Regarding claim 27, Kennedy, III et al teach the controller of claim 22 wherein the plurality of communication networks comprises a conventional telephone switching network **(38, FIG. 1, column 6, lines 7-10)**.

Regarding claim 29, Kennedy, III et al teach the controller of claim 22 further comprising a packet network interface for communicating using a packet protocol **(column 2, lines 5-12)**.

Regarding claim 34, Kennedy, III et al teach the controller of claim 22 wherein the operational software is capable of determining a routing for the requested call **(column 11, lines 35-40)**.

Regarding claim 35, Kennedy, III et al teach the controller of claim 34 wherein the routing is determined based upon a cost of use of a communication network **(column 10, lines 35-38)**.

Regarding claim 36, Kennedy, III et al teach the controller of claim 34 wherein the routing is based upon predefined call routing information **(column 12, lines 62-66)**.

Regarding claim 37, Kennedy, III et al teach the controller of claim 22 wherein the information requesting setup of a call comprises information related to telephony signals received by the information transmission device **(column 8, lines 1-10)**.

Regarding claim 38, Kennedy, III et al teach the controller of claim 37 wherein the telephony signals received comprise at least one of dual tone multi-frequency (DTMF) signals, dial tone, a ring signal, on-hook, off hook, and call progress tones **(column 8, lines 58-65, column 13, lines 2-6)**.

Regarding claim 39, Kennedy, III et al teach the controller of claim 22 wherein the parameters for configuring the information transmission device comprise information related to telephony signals generated by the information transmission device **(column 9, lines 3-13)**.

Regarding claim 40, Kennedy, III et al teach the controller of claim 39 wherein the telephony signals generated by the information transmission device comprise at least one of dual tone multi-frequency (DTMF) signals, dial tone, a busy signal, and a ringing signal **(column 13, lines 2-12)**.

Regarding claim 43, Kennedy, III et al teach the controller of claim 22 wherein the parameters for configuring the information transmission device comprise information related to at least one of a battery supply, over-voltage protection, ringing current, tone generation, tone detection, two wire to four wire conversion, and test functionality **(262, 264, 265, FIG. 6, column 13, lines 6-12)**.

Regarding claim 45, Kennedy, III et al teach the controller of claim 22 wherein the interface circuitry is capable of exchanging digitized voice information with the information transmission device **(column 10, lines 2-12)**.

Regarding claim 46, Kennedy, III et al teach the controller of claim 22 wherein the communication system controller **(106, FIG. 2)** and the information transmission device **(12, FIG. 1)** are located within the same housing **(14, FIG. 1, column 10, lines 56-61)**.

Regarding claim 47, Kennedy, III et al teach a communication system controller **(FIG. 3)** comprising:

- interface circuitry **(160, FIG. 3)** capable of providing configuration information to a system **(12, FIG. 1, FIG. 2)** supporting the communicative coupling of one of a plurality of communication networks **(16, FIG. 1)** to another of the plurality of communication networks **(38, FIG. 1)** based upon the configuration information **(column 12, lines 34-54)**;
- storage **(168, FIG. 3)** capable of containing operational software and call routing information **(column 11, lines 30-37)**; and
- at least one processor **(140, FIG. 3)** communicatively coupled to the interface circuitry **(160, FIG. 3)**, the at least one processor capable of accessing the operational software and call routing information **(column 11, lines 57-62)**, the operational software functioning at least to cause the at least one processor to **(140, FIG. 3)** produce the configuration information based upon call setup information and the call routing information **(column 12, lines 25-33, 45-54)**.

Regarding claim 48, Kennedy, III et al teach the controller of claim 47 wherein the plurality of communication networks comprises a packet network **(column 5, lines 56-61)**.

Regarding claim 52, Kennedy, III et al teach the controller of claim 47 wherein the plurality of communication networks comprises a conventional telephone switching network **(38, FIG. 1, column 6, lines 7-10)**.

Regarding claim 54, Kennedy, III et al teach the controller of claim 47 wherein the call setup information is received via one of the plurality of communication networks **(16, FIG. 1, column 5, lines 65-67)**.

Regarding claim 55, Kennedy, III et al teach the controller of claim 47 further comprising:

- a network interface **(170, FIG. 3)** adapted to communicate using a wired network **(column 8, lines 48-51)**.

Regarding claim 57, Kennedy, III et al teach the controller of claim 55 wherein the call setup information is received via the wired network **(column 12, lines 36-50)**.

Regarding claim 58, Kennedy, III et al teach the controller of claim 47 wherein the call setup information comprises a destination address **(column 12, lines 39-45)**.

Regarding claim 59, Kennedy, III et al teach the controller of claim 47 wherein the call routing information comprises at least one association of a destination address **(224, FIG. 5, column 13, lines 47-51, 55-57)** and a call route **(226, FIG. 5, column 13, lines 57-60)**.

Regarding claim 60, a machine-readable storage having stored thereon a computer program having a plurality of code sections for implementing a communication system controller, the code sections executable by a machine for causing the machine to perform the operations comprising:

- storing routing information received from a user at a first location **(42, FIG. 1, column 6, lines 35-48)**;

- accepting a call setup request from the user via one of a plurality of communication networks **(36, FIG. 1)**, the call setup request comprising a destination address **(column 12, lines 39-42)** corresponding to a second location **(42, 48, FIG. 1)**;
- determining routing information based upon at least one of the call setup request **(column 12, lines 62-67, column 13, lines 1-2)** and the stored routing information for the first user **(column 13, lines 23-27)**;
- generating configuration information using at least one of the call setup request and the routing information **(column 11, lines 1-3, column 12, lines 62-64)**; and
- providing the configuration information to a device **(42, FIG. 1, column 12, lines 30-31)** capable of communicatively coupling the user via one of a plurality of communication networks **(16, FIG. 1)** to the second location **(48, FIG. 1)** via another of the plurality of communication networks **(41, FIG. 1)** in order to establish the requested call **(column 12, lines 35-39)**.

Regarding claim 61, Kennedy, III et al teach the machine-readable storage of claim 60 wherein the plurality of communication networks comprises a packet network **(column 5, lines 56-61)**.

Regarding claim 64, Kennedy, III et al the machine-readable storage of claim 61 wherein the packet network comprises a wireless network **(24, FIG. 1, column 4, lines 5-12)**.

Regarding claim 65, Kennedy, III et al teach the machine-readable storage of claim 60 wherein the plurality of communication networks comprises a conventional telephone switching network **(38, FIG. 1, column 6, lines 7-10)**.

Regarding claim 67, Kennedy, III et al teach the machine-readable storage of claim 60 wherein the determining comprises:

- determining whether routing information corresponding to the destination address is available using the stored routing information and the destination address **(column 14, lines 9-19)**;
- prompting the user for routing information **(258, FIG. 6)**, if routing information corresponding to the destination address is not available **(column 14, lines 36-40)**; and
- refraining from prompting the user, if routing information corresponding to the destination address is available **(column 14, lines 55-57)**.

Regarding claim 68, Kennedy, III et al teach the machine-readable storage of claim 60 further comprising:

- sending to the second location **(42, FIG. 1)** a call setup request **(226, FIG. 5, column 13, lines 57-61)**.

Regarding claim 69, Kennedy, III et al teach the machine-readable storage of claim 60 further comprising:

- receiving from the second location **(42, FIG. 1)** acceptance of a call setup request **(column 13, lines 62-67, column 14, lines 1-4)**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 24-25, 28, 30-33, 41, 44, 49-51, 53, 56, 62-63, and 66 rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Henley et al (U.S Patent No. 5,526,353).

Regarding claims 24-25, 50-51, and 62-63, Kennedy, III et al teach the controller of claims 23, 48, and 61, respectively. However, Kennedy, III et al fail to explicitly teach the packet network communicates using an Internet protocol (IP) and the Internet Protocol (IP) further comprises the transmission control protocol (TCP)/Internet protocol (IP). Henley et al disclose a system and method for communication of audio data over a packet-based network. The teaching recite Transmission Control Protocol/Internet Protocol (TCP/IP) is one of the supported network and transport protocols **(column 4, lines 6-7)**. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to include TCP/IP as a transport protocol in the call delivery system as taught by Henley et al. One is motivated as such to employ error and flow control in order to realize significant loss of throughput in packet retransmissions **(column 4, lines 7-14)**.

Regarding claims 28, 53, and 66, Kennedy, III et al teach the controller of claims 27, 52, and 66, respectively. Kennedy, III et al, however, fail to explicitly teach the

conventional telephone switching network communicates using analog signals. Henley et al teach a communication system supporting audio data over a packet-based network consisting a telephone set interface (TSI) that accepts analog signal from the telephone instrument **(column 9, lines 51-54)**. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to allow the use of analog signals as a form of communication in the conventional telephone switching network as taught by Henley et al. One is motivated as such to restore the digitized sample and convert it into an analog voltage for reproduction in the telephone instrument **(column 10, lines 18-23)**.

Regarding claims 30 and 56, Kennedy, III et al teach the controller of claims 29 and 55, respectively. However, Kennedy, III et al fail to teach the packet protocol is compliant with an Ethernet protocol. Henley et al disclose a system and method for communication of audio data over a packet-based network. Henley et al recite a preferred embodiment is directed to Ethernet environment where each node in the computer network is designated by a specific address **(column 6, lines 15-21)**. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to make the packet protocol compliant with an Ethernet protocol. One is motivated as such to enable each packet assembly circuit the ability to determine the routing of the audio data through the network with a packet-based transmission protocol **(column 6, lines 27-21)**.

Regarding claims 31 and 49, Kennedy, III et al teach the controller of claims 29 and 48, respectively. However, Kennedy, III et al fail to teach the packets exchanged via

the packet network interface comprise digitized voice information. Henley et al disclose in the teaching a telephone server that's capable of providing digital service of audio data from the Ethernet physical layer **(column 9, lines 36-40)**. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the packets exchanged via the packet network interface comprised digital voice information. One is motivated as such to provide full ISDN communication to the central office trunk lines, subsequently allowing WAN via ATM **(column 8, lines 60-63)**.

Regarding claim 32, Kennedy, III et al teach the controller of claim 29 wherein the packets exchanged via the packet network interface comprise non-voice data **(column 10, lines 46-49)**.

Regarding claim 33, Kennedy, III et al teach the controller of claim 32 wherein at least a portion of the non-voice data is unrelated to the exchange of digitized voice information **(column 10, lines 49-53)**.

Regarding claim 41, Kennedy, III et al teach the controller of claim 22. Kennedy, III et al however, fail to teach the parameters for configuring the information transmission device comprise information related to the conversion of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information. Henley et al teach a system and method for communication of audio data over a packet-based network. The system according to the embodiment consist of a decompression/analog conversion circuit for converting a stream of digital audio data to analog audio signal **(column 7, lines 27-31)** and a digital compression circuit for

converting analog audio signal into a stream of digital audio data **(column 7, lines 19-21)**. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the parameters for configuring the information transmission device comprised information related to the conversion of digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information as taught by Henley et al. One is motivated as such to compensate for jitter in a computer network in order to provide high fidelity transmission of audio data through the network **(column 4, lines 66-67)**.

Regarding claim 44, Kennedy, **III** et al teach the controller of claim 22. Kennedy, III et al however, fail to teach the operational software is capable of reducing the quantity of digitized voice information exchanged via the information transmission device, by changing the packetization of digitized voice information when voice activity on one of the plurality of communication networks falls below a predetermined level. Henley et al teach a system and method for communication of audio data over a packet-based network. It is disclosed the system further comprises a decimation circuit for deleting audio data from a designated location of the buffer to shorten the portions of the stream of audio data in the buffer. The circuit addresses the problem when data are read from the buffer slower than they are written to the buffer **(column 5, lines 65-67, column 6, lines 1-5)**. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the operational software reduced the quantity of digitized voice information exchanged via the information transmission device by changing the packetization of

digitized voice when voice activity on one of the plurality of communication networks falls below a predetermined level. One is motivated as such to ensure the buffer stays close to its predetermined length for efficient realignment of the audio data in the buffer **(column 6, lines 11-14)**.

6. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy, III et al (U.S Patent No. 5,734,981) in view of Sharman (U.S Patent No. 5,774,854).

Regarding claim 42, Kennedy, III et al teach the controller of claim 22. Kennedy, III et al however, fail to teach the parameters for configuring the information transmission device comprise information related to the buffering of digitized voice information for a predefined period of time to minimize gaps in an analog voice signal. Sharman teaches a text to speech system operating in real using an acoustic processor and a linguistic processor. Due to the computational time the linguistic processor requires to process data, future requests from the acoustic processor cannot be made. Thus gaps in the speech output often occur when the acoustic processor requests data from the linguistic processor. Sharman proposes a solution to overcome the gaps in data by adjusting the buffer for minimal of output data so that future requests can be supplied in a timely manner **(column 7, lines 39-48)**. Hence the propagation delay caused by the linguistic processor is a factor affecting the adjustment in the buffer for desired optimal output. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teaching of Kennedy, III et al to have the parameters configuring information related to the buffering of digitized

voice information for a predefined period of time in order to minimize gaps in the analog voice signal as taught by Sharman. One is motivated as such to accurately halt the system based on the output in the event that an interruption occurs **(abstract, column 2, lines 34-39)**.

Conclusion

7. Any response to this Office Action should be **faxed** to (571) 273-8300 or **mailed** to:

Commissioner for Patents,
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-Delivered responses should be brought to
Customer Service Window
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Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khuong Tran, whose telephone number is (571) 270-3522. The examiner can normally be reached Mon-Fri from 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag G. Shah, can be reached at (571) 272-3144. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information

for unpublished application is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/K. T./

March 17, 2008

/Chirag G Shah/
Supervisory Patent Examiner, Art Unit 2619